

We claim:

1. A flow meter pickoff assembly for nulling a flow meter zero offset, the flow meter pickoff assembly comprising:

a mounting device affixed to a first flow meter portion of a flow meter;

5 a first pickoff sensor half adjustably affixed to the mounting device and configured to interact with a second pickoff sensor half affixed to a second flow meter portion, wherein at least one relative angle of the first pickoff sensor half in relation to the second pickoff sensor half can be adjusted by adjusting the first pickoff sensor half to the mounting device according to at least one adjustment axis; and

10 an adjustment means for enabling the first pickoff sensor half to adjust with respect to the mounting device along the at least one adjustment axis in order to adjust the at least one relative angle.

2. The flow meter pickoff assembly of claim 1, wherein the first pickoff sensor half is
15 adjustably affixed to the mounting device by one or more threaded fasteners.

3. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a portion of the first pickoff sensor half.

20 4. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a portion of the mounting device.

25 5. The flow meter pickoff assembly of claim 1, wherein the at least one relative angle comprises two relative angles and wherein an orientation of the first pickoff sensor half can be adjusted relative to the mounting device according to two adjustment axes.

6. The flow meter pickoff assembly of claim 1, with the adjustment means comprising a protrusion positioned between the first pickoff sensor half and the mounting device.

30 7. The flow meter pickoff assembly of claim 1, with the adjustment means comprising an at least partially elongated ridge positioned between the first pickoff sensor half and the mounting device.

8. The flow meter pickoff assembly of claim 1, with the adjustment means comprising a spacer positioned between the first pickoff sensor half and the mounting device.

5 9. The flow meter pickoff assembly of claim 1, with the adjustment means comprising a spacer positioned between the first pickoff sensor half and the mounting device and wherein the spacer is formed of an electrically non-conductive material.

10 10. The flow meter pickoff assembly of claim 1, wherein the adjustment means is substantially compressible.

11. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a deformable spacing shape.

15 12. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a deformable tab.

13. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a plurality of spacers.

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14. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a one or more spacers and a projection.

15. The flow meter pickoff assembly of claim 1, wherein the adjustment means
25 comprises one or more springs.

16. The flow meter pickoff assembly of claim 1, wherein the adjustment means comprises a projection and at least one spring.

17. A flow meter adjustment method for nulling a flow meter zero offset, the method comprising:

affixing a mounting device to a first flow meter portion of a flow meter;

adjustably affixing a first pickoff sensor half to the mounting device, with the first
5 pickoff sensor half being configured to interact with a second pickoff sensor half affixed to a
second flow meter portion, wherein at least one relative angle of the first pickoff sensor half in
relation to the second pickoff sensor half can be adjusted by adjusting the first pickoff sensor
half to the mounting device according to at least one adjustment axis; and

providing an adjustment means for enabling the first pickoff sensor half to adjust with
10 respect to the mounting device along the at least one adjustment axis in order to adjust the at
least one relative angle.

18. The method of claim 17, wherein the first pickoff sensor half is adjustably affixed
to the mounting device by one or more threaded fasteners.

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19. The method of claim 17, wherein the adjustment means comprises a portion of the
first pickoff sensor half.

20. The method of claim 17, wherein the adjustment means comprises a portion of the
20 mounting device.

21. The method of claim 17, wherein the at least one relative angle comprises two
relative angles and wherein an orientation of the first pickoff sensor half can be adjusted
relative to the mounting device according to two adjustment axes.

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22. The method of claim 17, with the adjustment means comprising a protrusion
positioned between the first pickoff sensor half and the mounting device.

23. The method of claim 17, with the adjustment means comprising an at least partially
30 elongated ridge positioned between the first pickoff sensor half and the mounting device.

24. The method of claim 17, with the adjustment means comprising a spacer positioned between the first pickoff sensor half and the mounting device.

5 25. The method of claim 17, with the adjustment means comprising a spacer positioned between the first pickoff sensor half and the mounting device and wherein the spacer is formed of an electrically non-conductive material.

10 26. The method of claim 17, wherein the adjustment means is substantially compressible.

27. The method of claim 17, wherein the adjustment means comprises a deformable spacing shape.

15 28. The method of claim 17, wherein the adjustment means comprises a deformable tab.

29. The method of claim 17, wherein the adjustment means comprises a plurality of spacers.

20 30. The method of claim 17, wherein the adjustment means comprises a one or more spacers and a projection.

25 31. The method of claim 17, wherein the adjustment means comprises one or more springs.

32. The method of claim 17, wherein the adjustment means comprises a projection and at least one spring.